Hyptis alata var. stenophylla Shinners, var. nov. Caulis (nodis exceptis) glaber vel subglaber. Folia caulina angusta plerumque laminis lanceolatis vel lineari-lanceolatis paucidenticulatis vel subintegris. TYPE: northwest of Loxahatchee in the Corbitt Wildlife Management area, Palm Beach Co., Florida, R. Kral 5657, 3 Sept. 1957 (holotype SMU, isotype FSU). "Frequent on moist to wet sandy peat of broad marsh and grass-sedge meadows." The leaf blades of these specimens are linear-lanceolate and subentire. In the following they are lanceolate and mostly few-toothed. All are from lower peninsular Florida. CHARLOTTE CO.: 15 miles north-northwest of Fort Myers, Kral 7502 (FSU). Caloose Experimental Range, southeastern Charlotte County, William P. Adams 218 (FSU). COLLIER CO. vicinity of Lake Trafford, about 3 miles west of Immokalee, Adams 208 (FSU). One mile south of Ochopee, Richard S. Mitchell 630 (FSU). DADE CO.: 5 miles west of Naranja, F. H. Sargent 6451 (SMU).

As indicated above, *H. leiocephala* Gandoger and *H. latidens* Urban are very probably synonyms of var. *stenophylla* rather than of var. *alata*. Unless it is desired to recognize two species, the precise disposition of these names is of no consequence.

I am greatly indebted to Dr. R. K. Godfrey for the loan of herbarium material from Florida State University.— LLOYD H. SHINNERS, SOUTHERN METHODIST UNIVERSITY, DALLAS 22, TEXAS.

MAKERS OF NORTH AMERICAN BOTANY¹

Who are the Makers of North American Botany? — When Dumas Malone and his associates organized the *Dictionary of American Biography* they posed the simple criterion when selecting the persons to be included: Did the botanist influence the American scene? Certainly not only the innovators but those who developed the science should be included. The *DAB* includes forty botanists² that are not mentioned by Humphrey. They are:

¹Makers of North American Botany. By Harry Baker Humphrey. Edited by Robert R. Humphrey. Ronald Press, New Pork. \$6.00 xi + 265 pp. 1961.

²See DAB Index volume, 373. 1943 and Supplements I and II.

W. P. C. Barton, W. D. Brackenridge, Robert Bridges, S. B. Buckley, Henry James Clark, John Clayton, Manasseh Cutler, Stephen Elliott, B. T. Galloway, F. H. Knowlton, Arthur Hollick, Henry Kraemer, Adam Kuhn, J. G. Lemmon, F. J. Lindheimer, Thomas Meehan, Ezra Michener, Elisha Mitchell, John Mitchell (d. 1768), Charles T. Mohr, J. S. Newberry, John Alsop Paine, Andrew Parmentier, F. P. Porcher, T. C. Porter, John L. Riddell, J. N. Rose, J. T. Rothrock, H. H. Rusby, P. A. Rydberg, H. P. Sartwell, J. L. E. W. Shecut, C. W. Short, George Thurber, Edward Tuckerman, L. M. Underwood, Thomas Walter, David White, E. H. Wilson, Charles Wright.

Certainly no two authors would select the same "makers of North American botany" but most, if not all, of the foregoing DAB biographees might be expected in a book described as "invaluable for biographical reference." Some other 'makers' that come to mind are David Hosack, who patronized botany and founded the Elgin Botanic Garden; Bernard M'Mahon, author of the first gardeners' guide to be printed in this country; Eugene Waldemar Hilgard, soil scientist and pioneer agronomist; John Belling, cytologist and stain technologist; Edward Palmer, ethnobotanist and zealous collector in remote regions of Mexico and the West; Almira Lincoln Phelps, student of Amos Eaton, author of an influential textbook used in women's colleges; David Fairchild, pioneer in the field of plant introduction, author of The World was my Garden, one of the best botanical story books of the century; Wilhelm Seifriz, geobotanist, physiologist, pioneer in protoplasmic studies; Edward Wilbur Berry, productive paleobotanist, whose knowledge of fossil plants surpassed many botanists' knowledge of living floras! and Alice Eastwood, whose seeds of enthusiasm for botany were sown in thousands of minds for over seventy years!

Dr. Humphrey did not live to see his book published and it was brought to print by his son who added a few sections to the account of 122 botanists. Regrettably the reference value is diminished by at least 94 typographical errors in the citation of names, dates, and bibliographical references

³Absence of Benjamin Smith Barton from the *DAB* is notable in view of his important role in fostering colonial botany. See Jeannette E. Graustein, *Penna. Mag. Hist.* and *Biog.* 85: 423-438. Oct. 1961, for the latest "informed judgment" on Professor Barton.

to render the book unreliable. This is partly failure to read proofs carefully, but there are many inconsistencies in the citation of references which were surely in the original manuscript.

Humphrey was evidently unaware of a number of important studies of some of the botanists he considered. How can he write of Rafinesque and not make use of Merrill's essays? Of Bartram, and not use Francis Harper's? Of Benjamin Smith Barton and of Muhlenberg and many other Philadelphia figures, and not use Pennell's contributions? He paid too little attention to the formative influences in the lives of the 'makers!' An index would have served as a guide to the influence of mentor on student, to contemporaries, such as John Belling, now lost within accounts. The outstanding contribution of the botanist is too often smothered in the recitation of medals and memberships. Humphrey's garland of botanical worthies is not a book of recollections written for the uninitiated reader browsing for pleasure. He wrote impersonally as if he feared intimacy even for those colleagues in his old United States Department of Agriculture whom he must have met almost daily. His prose is without relief in the recital of facts.

Only a few factual errors have been noticed. "Rev. Dr. [Zaccheus] Collins" mentioned as a Philadelphian who befriended F. A. Michaux was neither a minister nor a physician but a merchant. The oft-repeated misalliance of Audubon with Albert Kellogg has been corrected by Professor Geiser (1).

More numerous are the fallacious interpretations that appear all through the book. For example, to say E. L. Greene "had more than a casual interest" in *Pittonia* and *Erythea*, — journals which he had founded — is a singular understatement. Lewis David von Schweinitz's herbarium "became the property of the Academy of Natural Sciences of Philadelphia," it is true, but the lamentable scheme of von Schweinitz in discarding the collectors' original labels in favor of his own copied tickets is not mentioned. Humphrey's statement conveys the impression that this collection

of "approximately twenty-three thousand species" is valuable when in fact its value was seriously impaired (2). Humphrey infers that Sargent illustrated his Silva with 740 plates by his own hand when they were the work of Charles E. Faxon, a high point in American botanical illustration. Again and again the works of botanists are cited as 'solo flights' when rather they were co-authored by others who go unnoticed. Thus some notable events in American botany are missed altogether such as when Wilfred Robbins and Richard Holman created a winning text which was to outsell all competitors for nearly thirty years. It was recently revised by professors Weier and Stocking. Pursh is said to have worked on a flora of Canada making "several important botanical excursions," and assembling "important collections." Both are misleading statements, certainly not supported by the evidence which I presented in the paper that Humphrey cited. Pursh worked desultorily, frustrated partly by ill health brought on by discouraging lack of support for western exploration and by alcoholism. The few surviving Canadian collections (which evidently were thought unworthy of mounting by Lambert, Pursh's patron) give no impression of his former sharp eye for novelties and overlooked range extensions seen in his Virginia and New York collections. Nuttall's trip up the Missouri River with John Bradbury is misleadingly reported by Humphrey. Graustein's papers, overlooked by Humphrey, should be consulted regarding this relationship (3). William T. Hornaday, not D. T. MacDougal, wrote Campfires in Desert and Lava. Humphrey confused facts about Dr. Engelmann. The collected Botanical Works of Engelmann were a reissue of his many scattered papers, the original "notes, drawings, and data" of which are to be found in the sixty volumes preserved at the Missouri Botanical Garden. Amos Eaton never held a faculty appointment at Yale; in fact, he himself wrote that he had been "a mere learner at Yale." McAllister's Amos Eaton would have set Humphrey right on this point. Elias Durand's herbarium presented to the Jardin des Plantes represented a selection of one or a few sheets

of each species described from North America, — often removed from the Philadelphia Academy's collections! — to make up what Durand called the Herbarium Boreali Americanum. Agnes Chase and F. W. Pennell have recorded these facts (4). Jane Colden prepared notable descriptions of New York state plants, though her drawings were indeed indifferent. Together they fortify Humphrey's decision to include this remarkable young woman in the garland of North American botanists (5). To call T. S. Brandegee "one of the first pioneer plant collectors of the West" is to overlook the roll of honor drawn up by Alice Eastwood (6) which includes Collignon, Mocino, Haenke, Menzies, Chamisso, Vosnesensky, Douglas, Hartweg, Jeffrey, etc., — all prior to Brandegee in the West! There is no doubt of the importance of Brandegee in the extent and excellence of his collecting but Humphrey does not make this clear.

Notable is the considerable number of men who rose from amateurship to make a permanent mark in American botany. If an early motivation in the lives of these 'makers of North American botany' were sought in these sketches, it would be the appeal of the American outdoors. Sense of exploration played an important part in the formative years of botanists who ultimately were to enter the experimental laboratory as well as in those who were to leave their largest contribution in field botany.— JOSEPH EWAN, TULANE UNIVERSITY.

- 1. Field and Lab. 27:94. 1959.
- 2. F. W. Pennell in Bartonia 16: 1-8. 1935.
- 3. Chronica Botanica 14: 1-88. pls. 68-79, 1951; Mo. Hist. Soc. Bull. 12: 249-252. 1956.
- 4. Bartonia 17: 33-39, and 40-45. 1936.
- 5. Anna Murray Vail in Torreya 7:21-34. 1907.
- 6. Calif. Hist. Soc. Quart. 18: 335-346. 1939.